

## **Supplementary figure legends**

Supplemental Video. Intravital imaging of DCs interacting with collecting lymphatic vessel in adipose tissue outside of the popliteal LN. Just prior to imaging, Evan's blue dye was injected i.d. into the footpad draining to the imaged node, providing a strong red fluorescent contrast in the lymphatic collecting vessel. Green; CD11c<sup>+</sup> DCs identified by strong green-yellow fluorescence in the CD11c-YFP transgenic mouse. Blue; second harmonic signal, providing contrast primarily for collagen within PAT. This 24-minute image has been sped up ~300x.

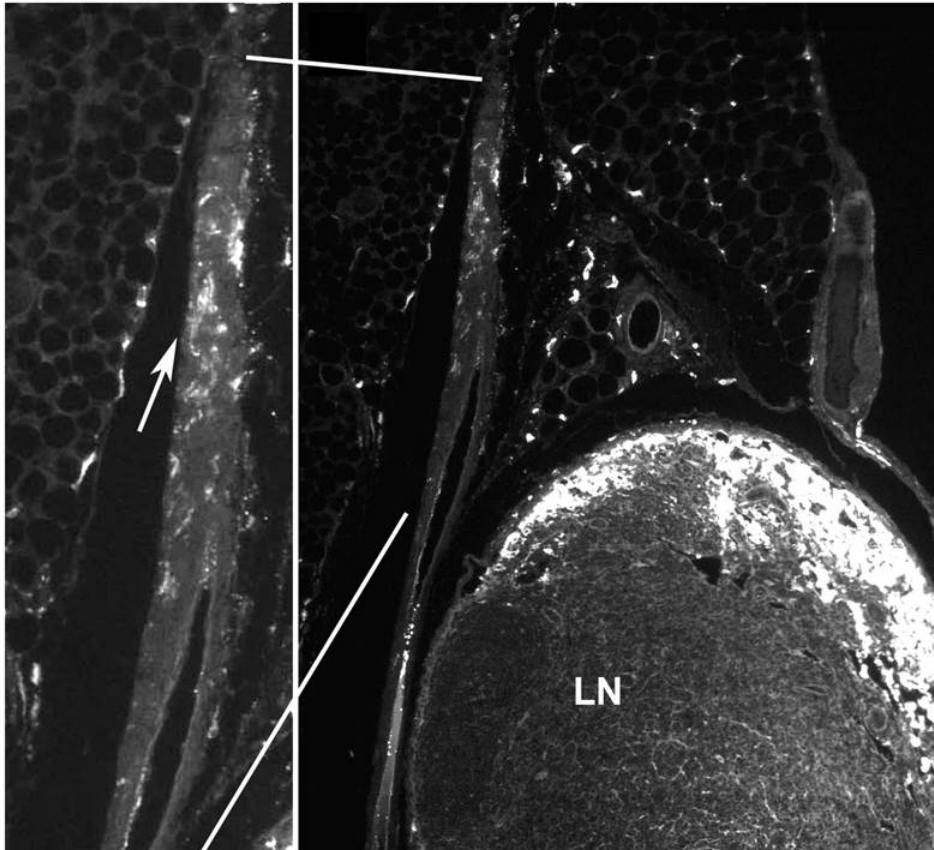


Figure S1. Soluble antigens delivered to skin can be taken up by phagocytes in PAT.  
Views of the PAT, LN, and wall of collecting lymphatic vessels in PAT 7 min after i.d. injection of TRITC-dextran. Left image shows an enlarged view of a portion of the image on the right, magnifying a collecting lymphatic vessel near the LN. The arrow in left image indicates an area of cells in the collecting vessel wall filled with TRITC-dextran. Scale bar is 20  $\mu\text{m}$ .

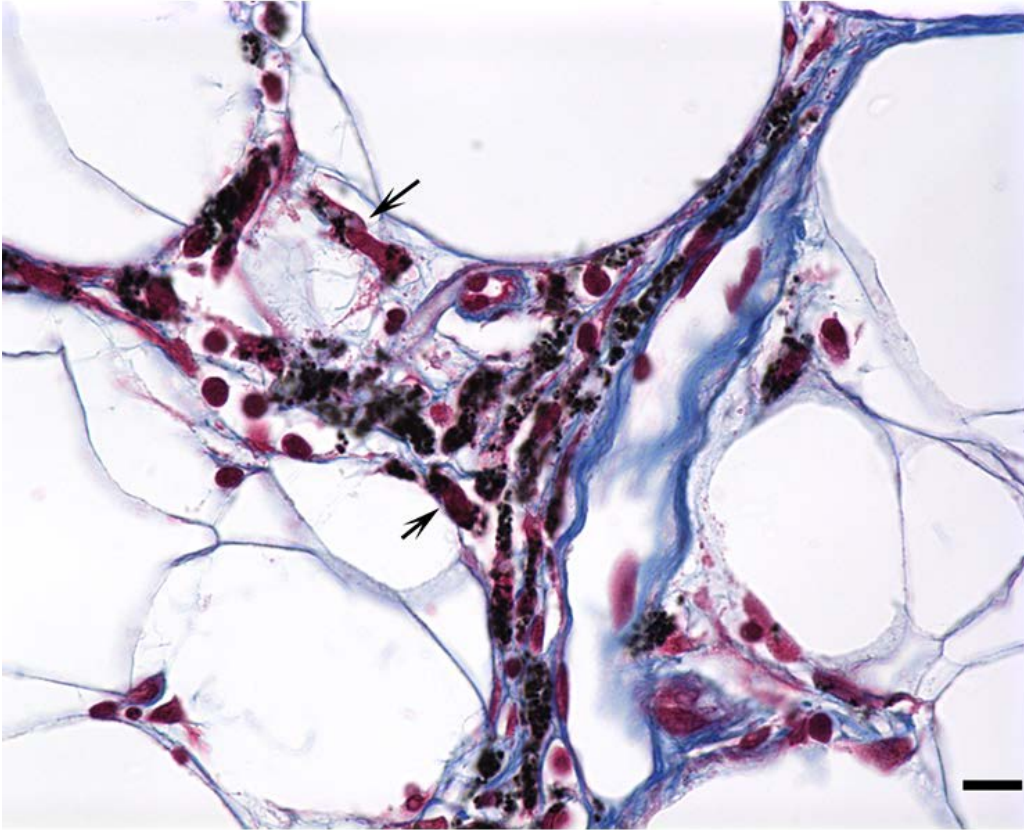


Figure S2. Accumulation of particulate matter in phagocytes within human perinodal adipose tissue. Masson's trichrome-stained section of human PAT outside a bronchial LN. Nuclei appear dark red, extracellular matrix is blue, and black material, indicated by black arrow, is particulate matter within cells, likely derived from cigarette smoke or other inhaled environmental particulates. Scale bar is 30  $\mu\text{m}$ .

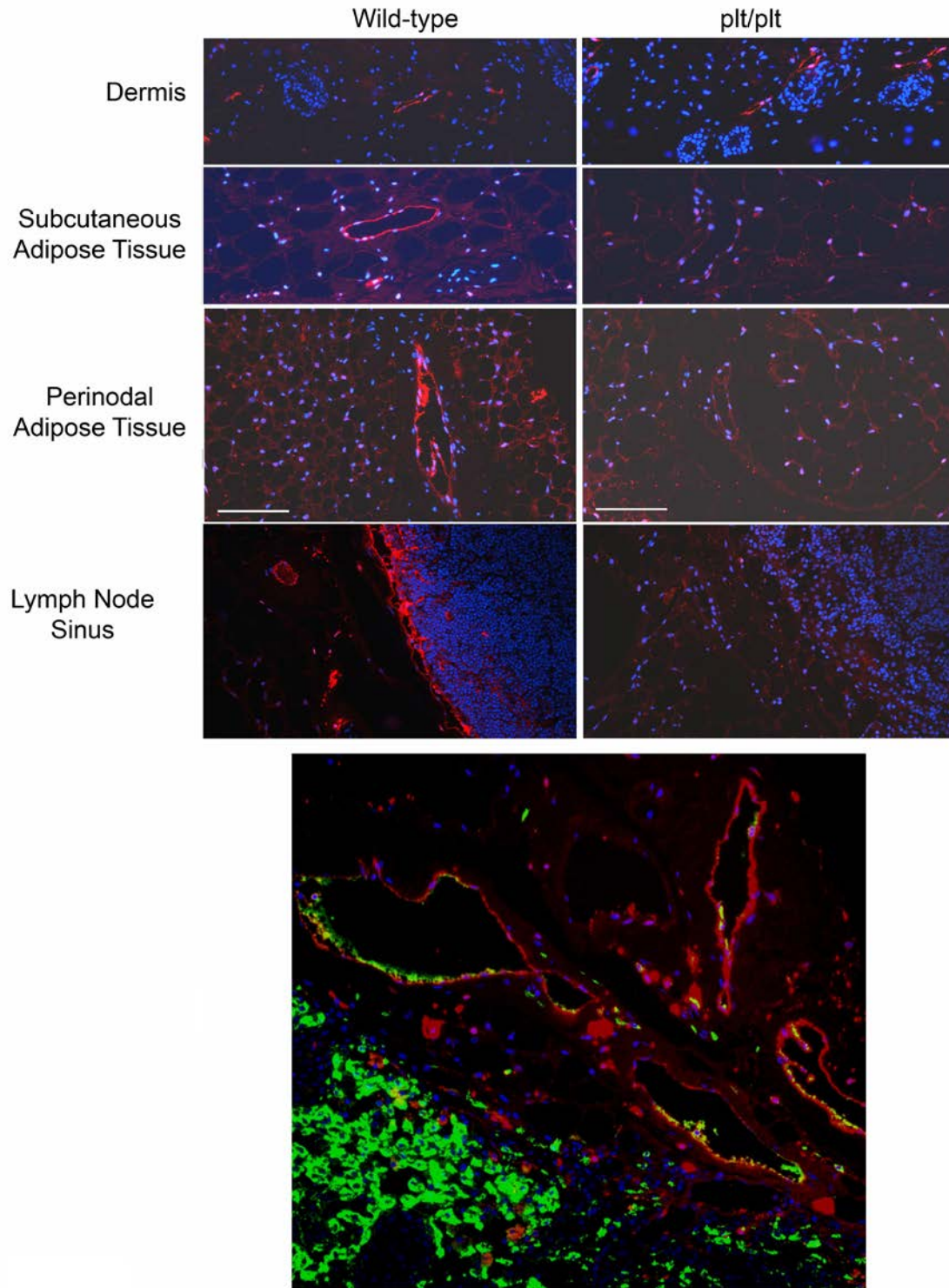


Figure S3. Expression of CCL21-Ser on collecting lymphatic vessels. LN, PAT, and the upstream skin together with subcutaneous adipose tissue from WT or *plt/plt* mice that lack CCL19 and CCL21-Ser, but not CCL21-Leu, were collected, fixed, and used for

whole-mouse immunostaining of CCL21 (red). Samples were embedded and sectioned as 2- $\mu\text{m}$  thickness for imaging. The bottom image shows collecting lymphatic vessels in PAT, stained by CCL21 (red) whole mount staining, was also labeled by 70 KDa FITC-dextran (green) i.d. injection to upper scapular WT mouse skin 10 min before mouse sacrifice. Nuclei were counterstained with DAPI (blue). Scale bar is 250  $\mu\text{m}$ .